

# SS053D

## SWITCHMODE SCHOTTKY RECTIFIER

LCD Backlighting is Portable Devices

Digital Cameras and Camcorders

Mobile Phones and accessories

Notebooks, Electronic Books

GPS

### Features

- Ultra low VF 420mV @ 500mA
- Ultra low VF 360mV @ 300mA
- · Low reverse current losses
- · Negligible switching losses
- · Extremely fast switching
- Meets MSL level 1, per J-STD-020

Solder dip 260 °C max. 10 s, per JESD 22-A111

RoHS compliant package

### **Mechanical Data**

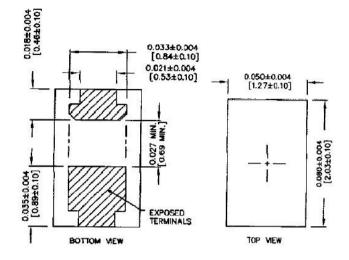
- Case : DFN 0805 case
- Packed with FRP substrate and epoxy under filled
- Molding compound meets UL 94 V-0 flammability
- Weight : 0.016 gram

### Packing & Order Information

3,000/Reel



### CASE: DFN-0805



Graphic symbol





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### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (Tc=25°C unless otherwise noted)						
Parameter	Symbol	SS053D	Unit			
Maximum repetitive peak reverse voltage	VRRM	30	V			
Working peak reverse voltage	VRWM	28	V			
Maximum DC blocking voltage	VDC	40	V			
Maximum average forward rectified current	IF(AV)	0.5	А			
Peak forward surge current		10	A			
8.3ms single half sine-wave superimposed	IFOM					
on rated load (JEDEC Method)	IFSM					
IAS = 2 A per diode						
Operating junction temperature range	TJ	-50 to +125	°C			
Storage temperature range	TSTG	-50 to +150	°C			

#### Notes:

Mounted on 2" Square PC Board with 1" Square Total Pad Size, PC Board FR4.

Electrical characteristics (Tc=25°C unless otherwise noted)							
Parameter	Symbol	Value		Unit			
		Typical	Max	Unit			
Instantaneous forward voltage at IF=0.3A, Tj=25°C	VF	0.36	0.45	V			
at IF=0.5A, Tj=25°C		0.42					
Maximum reverse current per leg Tj=25°C	IR	20	100	u'A			
at working peak reverse voltage Tj=125°C		20		m'A			

Thermal characteristics (Tc=25°C unless otherwise noted)					
Parameter	Symbol	Value	Unit		
Typical thermal resistance	RθJL	15	°C 11/		
	Rthja	80	°C/W		

#### Notes:

(1) Pulse test: 300  $\mu s$  pulse width, 1 % duty cycle

(2) Pulse test: Pulse width  $\leq$  40 ms



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